

Currently Pending Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1-19. (cancelled).

20. (currently amended) A method of screening for an agonist or an antagonist of PTH receptor activity comprising:

(a) contacting cells with a test compound wherein said cells express a rδNt polypeptide having an amino acid sequence at least 95% identical to a sequence selected from the group consisting of:

(i) the amino acid sequence from about position 1 to about position 435 in SEQ ID NO:2;

(ii) the amino acid sequence from about position 2 to about position 435 in SEQ ID NO:2;

(iii) the amino acid sequence from about position 23 to about position 435 in SEQ ID NO:2;

(iv) the amino acid sequence of the rδNt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136; and

(v) the amino acid sequence of the mature rδNt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136;

wherein said polypeptide has substantially identical structure and function to the structure and function of a rδNt receptor and wherein said polypeptide comprises a deletion of the extracellular amino-terminal ligand binding domain of a PTH-1 receptor, said extracellular amino-terminal ligand binding domain having an amino acid sequence from about 26 to about 181 in wild-type PTH receptor;

[[and]]

- (b) measuring ~~the biological response of cAMP accumulation in said cells; and~~
- (c) determining whether said test compound is an agonist or an antagonist of PTH receptor activity.

21. (cancelled).

22. (previously presented) The method of claim 20, wherein said agonist is a peptide.

23. (previously presented) The method of claim 20, wherein said antagonist is a peptide.

24. (currently amended) A method of screening for an agonist or an antagonist of PTH receptor activity comprising:

(a) contacting cells with a test compound wherein said cells express a rδNt polypeptide, wherein said cells comprise a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:

- (i) a nucleotide sequence encoding the amino acid sequence from about position 1 to about position 435 in SEQ ID NO:2;
- (ii) a nucleotide sequence encoding the amino acid sequence from about position 2 to about position 435 in SEQ ID NO:2;
- (iii) a nucleotide sequence encoding the amino acid sequence from about position 23 to about position 435 in SEQ ID NO:2;
- (iv) a nucleotide sequence encoding the rδNt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136; and

(v) a nucleotide sequence encoding the mature r δ Nt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136;

wherein said polypeptide has substantially identical structure and function to the structure and function of a r δ Nt receptor and wherein said polypeptide comprises a deletion of the extracellular amino-terminal ligand binding domain of a PTH-1 receptor, said extracellular amino-terminal ligand binding domain having an amino acid sequence from about 26 to about 181 in wild-type PTH receptor;

[[and]]

(b) measuring the biological response of cAMP accumulation in said cells; and
(c) determining whether said test compound is an agonist or an antagonist of PTH receptor activity.

25. (currently amended) A method of screening for an agonist or an antagonist of PTH receptor activity comprising:

(a) contacting cells with a test compound wherein said cells express a r δ Nt polypeptide having an amino acid sequence selected from the group consisting of:
(i) the amino acid sequence from about position 1 to about position 435 in SEQ ID NO:2;
(ii) the amino acid sequence from about position 2 to about position 435 in SEQ ID NO:2;
(iii) the amino acid sequence from about position 23 to about position 435 in SEQ ID NO:2;
(iv) the amino acid sequence of the r δ Nt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136; and

(v) the amino acid sequence of the mature r δ Nt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136;

wherein said polypeptide comprises a deletion of the extracellular amino-terminal ligand binding domain of a PTH-1 receptor, said extracellular amino-terminal ligand binding domain having an amino acid sequence from about 26 to about 181 in wild-type PTH receptor;

[[and]]

(b) measuring the biological response of cAMP accumulation in said cells; and
(c) determining whether said test compound is an agonist or an antagonist of PTH receptor activity.

26. (currently amended) A method of screening for an agonist or an antagonist of PTH receptor activity comprising:

(a) contacting cells with a test compound wherein said cells express a r δ Nt polypeptide, wherein said cells comprise a polynucleotide having a nucleotide sequence selected from the group consisting of:

(i) a nucleotide sequence encoding the amino acid sequence from about position 1 to about position 435 in SEQ ID NO:2;

(ii) a nucleotide sequence encoding the amino acid sequence from about position 2 to about position 435 in SEQ ID NO:2;

(iii) a nucleotide sequence encoding the amino acid sequence from about position 23 to about position 435 in SEQ ID NO:2;

(iv) a nucleotide sequence encoding the r δ Nt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136; and

(v) a nucleotide sequence encoding the mature rδNt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136;

wherein said polypeptide comprises a deletion of the extracellular amino-terminal ligand binding domain of a PTH-1 receptor, said extracellular amino-terminal ligand binding domain having an amino acid sequence from about 26 to about 181 in wild-type PTH receptor;

[[and]]

(b) measuring the biological response of cAMP accumulation in said cells; and
(c) determining whether said test compound is an agonist or an antagonist of PTH receptor activity.

27. (new) A method of screening for an agonist or an antagonist of PTH receptor activity comprising:

(a) providing an iodinated test compound;
(b) contacting cells with said iodinated test compound wherein said cells express a rδNt polypeptide, wherein said cells comprise a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:
(i) a nucleotide sequence encoding the amino acid sequence from about position 1 to about position 435 in SEQ ID NO:2;
(ii) a nucleotide sequence encoding the amino acid sequence from about position 2 to about position 435 in SEQ ID NO:2;
(iii) a nucleotide sequence encoding the amino acid sequence from about position 23 to about position 435 in SEQ ID NO:2;

(iv) a nucleotide sequence encoding the r δ Nt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136; and

(v) a nucleotide sequence encoding the mature r δ Nt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136;

wherein said polypeptide has substantially identical structure and function to the structure and function of a r δ Nt receptor and wherein said polypeptide comprises a deletion of the extracellular amino-terminal ligand binding domain of a PTH-1 receptor, said extracellular amino-terminal ligand binding domain having an amino acid sequence from about 26 to about 181 in wild-type PTH receptor; and

(b) determining whether said iodinated test compound competitively binds to said r δ Nt polypeptide.

28. (new) A method of screening for an agonist or an antagonist of PTH receptor activity comprising:

(a) providing an iodinated test compound;

(b) contacting cells with said iodinated test compound wherein said cells express a r δ Nt polypeptide having an amino acid sequence at least 95% identical to a sequence selected from the group consisting of:

(i) the amino acid sequence from about position 1 to about position 435 in SEQ ID NO:2;

(ii) the amino acid sequence from about position 2 to about position 435 in SEQ ID NO:2;

(iii) the amino acid sequence from about position 23 to about position 435 in SEQ ID NO:2;

(iv) the amino acid sequence of the r δ Nt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136; and

(v) the amino acid sequence of the mature r δ Nt polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. PTA-1136;

wherein said polypeptide has substantially identical structure and function to the structure and function of a r δ Nt receptor and wherein said polypeptide comprises a deletion of the extracellular amino-terminal ligand binding domain of a PTH-1 receptor, said extracellular amino-terminal ligand binding domain having an amino acid sequence from about 26 to about 181 in wild-type PTH receptor; and

(b) determining whether said iodinated test compound competitively binds to said r δ Nt polypeptide.